

Wireless Communications System With Secondary Synchronization Code  
Based On Values In Primary Synchronization Code

ABSTRACT OF THE DISCLOSURE

A wireless communication system. The system comprises transmitter circuitry (BST1), the transmitter circuitry comprising encoder circuitry (50) for transmitting a plurality of frames (FR). Each of the plurality of frames comprises a primary synchronization code (PCS) and a secondary synchronization code (SSC). The encoder circuitry comprises of circuitry (50<sub>1</sub>) for providing the primary synchronization code in response to a first sequence (32). The encoder circuitry further comprises circuitry (50<sub>2</sub>) for providing the secondary synchronization code in response to a second sequence (54) and a third sequence (56). The second sequence is selected from a plurality of sequences. Each of the plurality of sequences is orthogonal with respect to all other sequences in the plurality of sequences. The third sequence comprises a subset of bits from the first sequence.